

## Guide to the Issues #3: Solar Power in Texas

The Electric Reliability Council of Texas (ERCOT) has determined that use of solar power will grow significantly in the State of Texas. A decline in the cost of solar technology is predicted to result in significant solar expansion across ERCOT by 2029.<sup>1</sup>

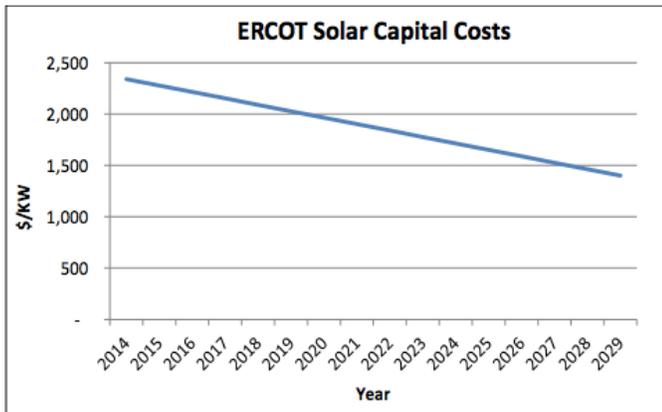


Figure 2: ERCOT Solar Capital Costs

Renewable resources like wind and solar power are already generating a significant amount of electricity in Texas, primarily due to rapid growth of wind generation. In 1999, the legislature established a Renewable Portfolio Standard (RPS) requiring that 10,000 MW of electricity be generated by renewable resources by 2025. **We reached and exceeded that goal 15 years early.**

### THE COST OF SOLAR CONTINUES TO DECLINE

With the consistent and rapid decrease in the cost of solar technology, market forces will bring more solar power into the Texas generation mix, and the trend is expected to accelerate over time. **The average price for installed solar systems in Texas fell 23% in 2013<sup>2</sup> and 20% in 2014<sup>3</sup>.**

<sup>1</sup> <http://www.ercot.com/content/news/presentations/2014/ERCOTAnalysis-ImpactsCleanPowerPlan.pdf>

<sup>2</sup> *Texas Solar 101 Fact Sheet*, Solar Energy Industries Association ([www.SEIA.org](http://www.SEIA.org)), June 2, 2014)

<sup>3</sup> *Texas State Fact Sheet*, Solar Energy Industries Association ([www.SEIA.org](http://www.SEIA.org)), March 10, 2015)

Chart "Figure 2: ERCOT Solar Capital Costs";

<http://www.ercot.com/content/news/presentations/2014/ERCOTAnalysis-ImpactsCleanPowerPlan.pdf>

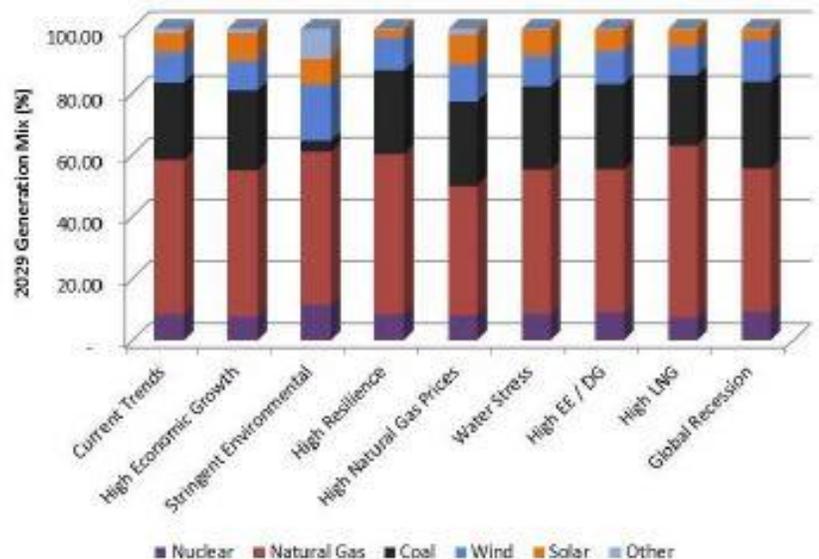
ERCOT's long-term projections indicate that solar capacity will increase to over 10,000 MW in the coming years. Statewide solar generation increased 265% from 2011 to 2012 alone, from 36,580 MWh to 133,642 MWh.<sup>4</sup>

Texas is ranked<sup>5</sup>:

- 1st nationally in solar potential.
- 6th solar energy industry employment.
- 11<sup>th</sup> in installed solar capacity.

### ERCOT PREDICTS SIGNIFICANT GROWTH IN

**SOLAR** Last December, ERCOT released a study to determine what additional electric transmission and generation capacity are needed over the next 10-15 years to ensure the reliability of the electric grid. ERCOT analyzed how a variety of market and regulatory factors might affect the mix of power sources used to produce electricity in Texas. **All nine scenarios predicted significant additions of solar power, and in some scenarios up to 16,500 MW of solar could be added by 2029.**<sup>6</sup>



<sup>4</sup> *The Texas Renewable Industry, 2014*; Office of the Governor, Economic Development and Tourism Business Research ([www.TexasWideOpenForBusiness.com](http://www.TexasWideOpenForBusiness.com))

<sup>5</sup> Ibid.

<sup>6</sup> *2014 Long Term Assessment Report*, pps. 33; 38-40 (ERCOT System Planning, December 2014)